

CLAIMS

What is claimed is:

1 ~~1.~~ A method of communication in a system area network
2 including a plurality of interconnected nodes that each
3 have at least one port, said method comprising:

4 marking a port to prevent transmission to another
5 node of packets of a first traffic type while permitting
6 transmission to another node of packets of a second
7 traffic type; and

8 thereafter, routing via said port only packets not
9 of said first traffic type.

1 2. The method of Claim 1, and further comprising
2 storing a routing table that associates ports with node
3 identifiers, and wherein routing comprises routing by
4 reference to said routing table.

1 3. The method of Claim 2, wherein marking said port
2 comprises marking said port in a port configuration
3 register.

1 4. The method of Claim 1, and further comprising
2 determining a traffic type by reference to a packet
3 header.

1 5. The method of Claim 1, said first traffic type
2 comprising non-configuration traffic and said second
3 traffic type comprising configuration traffic, wherein
4 marking comprises marking said port to prevent
5 transmission to another node of packets of non-
6 configuration traffic while permitting transmission to
7 another node of packets of configuration traffic.

1 6. The method of Claim 5, and further comprising
2 following transmission of packets of configuration
3 traffic, removing said marking of said port.

1 7. The method of Claim 6, and further comprising:

2 in response to transmission of said packets of
3 configuration traffic, altering at least one node
4 identifier used in packet routing.

1 8. The method of Claim 1, wherein marking comprises
2 automatically marking in response to said port being
3 unconnected at initialization of the system area network.

1 9. A node for a system area network, said node
2 comprising:

3 at least one device coupled to a network chip having
4 a port for interconnection to another node, wherein
5 responsive to said port being marked to prevent
6 transmission of a first traffic type via said port while
7 permitting transmission of packets of a second traffic
8 type, said network chip routes via said port only packets
9 not of said first traffic type.

1 10. The node of Claim 9, and further comprising a
2 routing table accessible to said network chip that
3 associates ports with node identifiers, wherein said
4 network chip routes packets by reference to said routing
5 table.

1 11. The node of Claim 10, and further comprising a port
2 configuration register containing said marking of said
3 port.

1 12. The node of Claim 9, wherein said network chip
2 determines a traffic type of a packet by reference to a
3 packet header of the packet.

1 13. The node of Claim 9, wherein said first traffic type
2 comprises non-configuration traffic and said second
3 traffic type comprises configuration traffic.

1 14. The node of Claim 13, wherein following transmission
2 of packets of configuration traffic said network chip
3 removes said marking of said port.

1 15. The node of Claim 14, wherein said network chip,
2 responsive to transmission of said packets of
3 configuration traffic, alters a node identifier used in
4 packet routing.

1 16. The node of Claim 9, wherein said network chip marks
2 said node automatically marking if said port is
3 unconnected at initialization of the system area network.

1 ~~17.~~ A system area network, comprising:

2 a plurality of interconnected nodes including at
3 least one node according to Claim 9.

1 18. A network chip for a node in a system area network
2 including a plurality of nodes, said network chip
3 comprising:

4 a port for inter-node communication;

5 means for marking the port to prevent transmission
6 to another node of packets of a first traffic type while
7 permitting transmission to another node of packets of a
8 second traffic type; and

9 means for, if said port is marked, routing via said
10 port only packets not of said first traffic type.

1 19. The network chip of Claim 18, and further comprising
2 a routing table that associates said port with node
3 identifier of at least one of said plurality of nodes,
4 wherein said means for routing routes packets by
5 reference to said routing table.

1 20. The network chip of Claim 19, wherein said means for
2 marking comprises means for marking said port by setting
3 a port configuration register.

1 21. The network of Claim 18, wherein said network chip
2 comprises means for determining a traffic type of a
3 packet by reference to a packet header of the packet.

1 22. The network chip of Claim 18, wherein said first
2 traffic type comprises non-configuration traffic and said
3 second traffic type comprises configuration traffic.

1 23. The network chip of Claim 22, and further comprising
2 means for, following transmission of packets of
3 configuration traffic, removing said marking of said
4 port.

1 24. The network chip of Claim 23, and further comprising
2 means, responsive to transmission of said packets of
3 configuration traffic, altering a node identifier used in
4 packet routing.

1 25. The network chip of Claim 18, wherein said means for
2 marking comprises means for automatically marking said
3 port if said port is unconnected at initialization of the
4 system area network.